

NOTES ON JOINT EPA-ODH VISIT TO AMERICAN CYANAMID,  
WASHINGTON COUNTY, MARIETTA, INDUSTRIAL WASTE.

Nelsonville, Ohio, December 9, 1971.

On November 23, 1971, a visit was made to the above plant to inspect wastewater pre-treatment facilities tributary to the Marietta sewage treatment plant. Those present during the visit were:

Ray Leech	Plant Manager - American Cyanamid
Bill Constantelos	EPA - Ohio District Office
Jim Spaulding	EPA - Ohio District Office
John M. Fairall	EPA - Cincinnati Office
Steve Hamlin	ODH - SEDO
Al Coulson	ODH - SEDO
Fred Klingelhafer	ODH - SEDO

At the time of the visit, the plant was not discharging to the Marietta sewage treatment plant.

Water Supply: Water used in the plant is provided by the Marietta water treatment plant.

Raw Materials: Materials used in the plant are varied. Some of the more common materials used are acids, chlorides chlorine, caustics, anhydrous ammonia and alcohols.

Products: Products from this organic chemical plant includes dyes and intermediates. Some of the more common products include oramine, brighteners, absorbers, 2NDPA (solid rocket fuel), etc.



Wastewater: Wastewater from the plant is largely from filter press wash water although 12% of the total wastewater is cooling water. The BOD and COD in the effluent are largely in dissolved solids form. Wastewater originates almost entirely from batch processes of manufacturing.

Pre-Treatment System: After the waste leaves the plant it flows to a 3.5 million gallon primary lagoon. As the waste exits the primary lagoon it is neutralized by anhydrous ammonia and pumped to an 18.5 million gallon secondary lagoon. This secondary lagoon has enough free-board to allow a ten day impounding capacity if needed.

Rate of Flow: American Cyanamid is discharging to the Marietta sewage treatment plant at a rate of 400 to 600 g.p.m. over a 24 hour period. The initial discharge to the Marietta system was made on May 17, 1971. The last continuous discharge to Duck Creek was made on March 31, 1971.

Marietta Sewage Treatment Plant: On the day of the visit the Marietta sewage treatment plant did not have the usual red appearance probably due to American Cyanamid's shutdown. Mr. Ed Kahrig, sewage treatment plant operator, stated that large concentrations of ammonia were usually present in the effluent. It was also noted that most of the time chlorine residuals were not attainable, probably due to the high ammonia content from American Cyanamid.

Fred Klingelhafer,  
District Sanitary Engineer.

FK/ah